0570

7

Page 1 of 8





OIPE

RAW SEQUENCE LISTING

7 :: 110 - APPLICANT: Renner, Wolfgang A.

PATENT APPLICATION: US/10/050,898

DATE: 01/27/2003 TIME: 09:46:25

Input Set : A:\1700.0190005seqlist.txt
Output Set: N:\CRF4\01242003\J050898.raw

```
Bachmann, Martin
         Tisset, Alain
1::
         Maorer, Patrick
11
         Lechner, Franziska
1.
         Salkel, Peter
1 :
         Piessek, Christine
14
         Ortmann, Earner
15,
         Luera, Rainer
16
         Staurenhiel, Matthias
17
         Frey, Peter
19 <120> TITLE OF INVENTION: Molecular Antigen Array
21 -: 130 > FILE REFERENCE: 1700.0190005
.3 ×140 > CUPERIT APPLICATION NUMBER: 10/050,898
.4 -:141 - CUERENT FILLING DATE: 2002-01-18
16 - 150 - PEIGE APPLICATION NUMBER: US 60/262,379
.7 -: 191 / PRIOR FILIDA DATE: 1001-01-19
29 -150 - PRIOR APPLICATION NUMBER: US 60/288,549
70 HIGHE PRIOR FILING DATE: 2001-05-04
FI -: 150 - PRIOR APPLICATION NUMBER: US 60/326,998
33 HIFTH PRIOR FILING DATE: 2001-10-05
35 150 - PEIOF APPLICATION NUMBER: US 60/331,045
36 - 151 - PRIOR FILING DATE: 1001-11-07
38 -: 160 NUMBER OF SEQ ID NOS: 350
40 <170 > SOFTWARE: Patentin Ver. 2.1
42 K210 / SEQ II NO: 1
45 -0011 - LENGTH: 41
44 KOIDS TYPE: DNA
45 (213) OF CAMISM: Artificial Sequence
47 KILO - FEATURE:
49 -000 ar OTHER INFORMATION: Primer
.. H - BEQUENCE: I
🗐 ugguacgogt goagbaqgta accaccgtta aagaaggcac c
                                                                        41
54 -0110 - SEQ ID NO: 0
!! HILL LENGTH: 44
16 HILL TYPE: DNA
57 HELLS OFGANISM: Artificial Sequence
the HOLDER FEATURE:
60 - COS OTHER INFORMATION: Primer
60 H4000 SECUENCE: 2
to eggingtiae etgetgeacg egitgettaa gegaeatgia gegg
                                                                        44
(6 - THUE SEC ID NO: 3
```

€7 <2110 LENGTH: 20

PATENT APPLICATION: US/10/050,898

DATE: 01/27/2003 TIME: 09:46:25

Input Set : A:\1700.0190005seqlist.txt
Output Set: N:\CRF4\01242003\J050898.raw

68 <2125 TYPE: DUA 69 KM1 % ORGANIAM: Artificial Sequence 71 H. DO FEATUPE: 72 KL W CTHEE INFORMATION: Primer 74 HACTO SEQUENCE: 3 20 75 obatgaçãos targataced 78 -0.100 SEQ 11: NO: 4 80 HILLS TYPE: DEA 81 -0.130 OFGANISM: Astificial Sequence 83 -0.00 FEATURE: 84 HOLDS OTHER INFORMATION: Primer 86 KANOCH SEQUENCE: 4 25 87 ggmantsand gededettta dagge 90 -010- SEQ 11 NO: 5 91 - C11 - LENSTH: 47 91 - 211. TYPE: DNA 93 -0013 - OFGANIOM: Artificial Sequence 95 ROLOW FEATURE: 96 KIIBS OTHER INFORMATION: Primer 98 <400> SEQUENCE: 5 99 cettetttaa eugtagttac etgetggeaa ecaaegtggt teatgac 47 102 F0100 SEQ ID NO: 6 103 /011: LENGTH: 40 104 - DAIN TYPE: DNA 105 - 113 - OEGANISM: Artificial Sequence 107 KINGO FEATURE: 108 -0003 - OTHER INFORMATION: Primer 110 <400 SEQUENCE: 6 40 111 augmente cacquetyty oggtygtogy atogcocygo 114 - 210 - SEQ ID NO: 7 115 K2110 LENGTH: 90 116 KAID - TYPE: DNA 117 KI13 OF GANISM: Artificial Sequence 119 < 000 + FEATURE: 100 WILL OTHER INFORMATION: Primer 112 <400 \ SEQUENCE: 7 103 gggtotagat toocaaccat toocttated aggettittg acaacgetat geteegegee 60 1.4 catogtotgo accagotggo ottigadado 117 -010 - SEQ ID NO: 8 12a will a DEMOTH: 11a 1. A H. L. - TYPE: DUA 1:0 -0013 - OEGANIOM: Artificial Sequence 1 TO SELECT FEATURE: 133 KUTS - OTHER INFORMATION: Primer 1:1 -400 - SEQUENCE: 8

196 grantstagma gyaggtaaaa aacgatgaaa aagacagota togogattgo agtggcactg 60

13/ activiting staccytage graggeotte beaaccatte cettatee -

140 (210 / SEQ ID NO: 9

108

PATENT APPLICATION: US/10/050,898

DATE: 01/27/2003 TIME: 09:46:25

Input Set : A:\1700.0190005seqlist.txt
Output Set: N:\CRF4\01242003\J050898.raw

141 · 0110 LEWSTH: 01	
142 + 1; TYPE: DNA	
143 + 15 + OF WANDEM: Artificial Sequence	
145 + 730 + PEATUFE:	
146 OTHER INFORMATION: Primer	
148 + 400 + EF,UENE: 9	
149 gangaatt matagaagacad agatgacata a	31
152 - 210 - SEQ 31: NO: 10	
153 + 311 + DENGTE: U4	
154 - LL - TYFE: DNA	
155 - 113 - OFGANICM: Artificial Sequence	
157 - 130 - FEATURE:	
15% - LTD - OTHER INFORMATION: Primer	
160 + 400 + CEQUENCE: 10	
161 catacagatag tetracegae acce	24
164 - 110 - SEQ II NO: 11	
165 - 113 LENGCH: 43	
166 - /13 - TYPE: DNA	
167 - Pile OFCANDEN: Artificial Sequence	
169 + 120 + FEATURE:	
170 <023 OTHER INFORMATION: Primer	
17:: +400 - SEQUEDE: 11	
17: coyoqqaaqa qobaboqcaa boaccgtgtg bogccaggat g	41
176 - 130 - SEO IN NO: 12	
177 - 211 - LENGTH: 33	
178 - 112 - TYFE: CMA	
179 F.C OF CANTSM: Artificial Sequence	
181 - 210 - FEATUFE:	
183 KILLS OTHER INFORMATION: Primer	
184 - 400 - SEQUEDOE: 02	
185 statcatota quatquatag aggattottt aac	33
188 K210 - SEQ CD NO: 13	
189 KONIN LENGTH: 15	
190 KG12> TYFE: DNA	
191 k013> OFCANISM: Artificial Sequence	
193 HILD - FEATURE:	
194 · .: 3 · OTHER IMFORMATION: Modified ribosome binding site	
197 + 400	
14M aggaggtada adaby	15
000 - 10 - 380 IP NO: 14	
. 0.1 11 - LENGTH: 31	
NOR RING TYPE: PRT	
204 - 213 - OFGANISM: Artificial Sequence	
2006 - 220 - FEATURE:	
207 - 223 - OTHER INFORMATION: signal peptide	
210 - 400 - SEQUENCE: 14	
211 Met Lys Lys Thr Ala Ile Ala Ile Ala Val Ala Leu Ala Gly Phe Ala	
212 1 5 10	
214 Trr Val Ala 31n Ala	

PATENT APPLICATION: US/10/050,898

DATE: 01/27/2003 TIME: 09:46:25

!nput Set : A:\1700.0190005seqlist.txt
On!put Set: N:\CRF4\01242003\J050898.raw

```
215
.18 -.105 SEQ IE 10: 15
1.19 - 111 - LENGTH: 46
130 + 21. - TYLE: PRI
.21 -21 - GFCANISM: Artificial Sequence
::23 + . . 6 + FEATUFE:
.24 - .. OTHER INFORMATION: modified Fos construct
327 - 460 - PEQUENCE: 15
128 Cys Gly Gly Lea Thr Asp Thr Leu Gln Ala Glu Thr Asp Gln Val Glu
                                          10
.09 1
INT Asp. Glo Lys Ser Ala Leu Gln Thr Glu Ile Ala Asn Leu Leu Lys Glu
                                     2.5
234 Lys Glo Lys Let Glu Phe Ile Leu Ala Ala His Gly Gly Cys
                                  40
79% - J10 - CEQ ID NO: 16
_39 + 11 + LENGTH: +
240 - 12 - TYLE: PET
141 - 213 - OFGANISM: Artificial Sequence
243 FLATURE:
244 - 223 - OTHER INFORMATION: peptide linker
246 4400 - SEQUENCE: 16
047 Ala Ala Ala Ser Gly Gly
. 4 1
353 k210 k SEQ ID 199: 17
252 -211 - LENGTH: 6
153 - 111 - TYFE: PET
354 - 213 - OFGANISM: Artificial Sequence
156 - JOON FEATURE:
197 - 221 - OTHER INFORMATION: Description of Artificial Sequence: pertide linker
259 <4000 SEQUENCE: 17
.60 Gly Gly Ser Ala Ala Ala
161 1
164 <210. SEQ ID NO: 18
 265 kill + LENGTH: 256
166 FILES TYPE: DNA
167 × 213 · OFGAMISM: Artificial Sequence
269 <2000 FEATURE:
170 KUSSA OTHER INFORMATION: Fos fusion construct
[73 - 400] BEUTENCE: 18
 173 pinitonipa patikaaad patgamaaag abagotatog ogattgbagt ggdactggot 60
.74 ygttroyeta new gogda ggodtgogtg ggggdggddg eildiggtgg tigoggiggt 120
275 etgaecquea ecetydaggo ggaaacegad caggtggaag acgaaaaato egogotgcaa 180
176 amediaautog ogsinetgot gaaagasaaa gaaaagstgg agtteateet ggeggeaeae 240
                               256
,77 agragttact aadart
.∂n -_10 - SBQ II N∪: 19
181 - 211 - LENGTH: 52
182 FUND FIFT
183 - 13 - 08 GAMISM: Artificial Sequence
 185 - 220 - FLATURE:
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PATENT APPLICATION: US/10/050,898 TIME: 09:46:25

DATE: 01/27/2003

Input Set : A:\1700.0190005seqlist.txt
Output Set: N:\CRF4\01242003\J050898.raw

186 < 125 CTHER INFOFMATION: Fos fusion construct 1-3 <4': SEQUENCE: 19 189 Ala Ala Ala Ser Gly Gly Cys Gly Gly Leu Thr Asp Thr Leu Gln Ala 10 190 Old Thr Amp Gir. Val. Glu Asp Glu Lys Ser Ala Leu Gln Thr Glu Ile .30 25 111: .90 Alu Ash Lou Len Lys Glu Lys Glu Lys Leu Glu Phe Ile Leu Ala Ala 40 200 55 29% His Gly Gly Cys 199 50 202 - 210 - SEQ TE NO: 30 204 - 211 - LENGTE: 1.61 RIA - MIL - TYPE: DNA 506 - 11:0 ORGANISM: Artificial Sequence PAS - MOD - FEATURE: MOW - 1. 3 - OTHER INFORMATION: Fos fusion construct Fil - L.O - FEATURE: 312 - LI - NAME/KEY: CDS 11: - PIP - LOCATION: (32)..(240) 315 -400 - SEQUENCE: 20 $\pm i\,\hat{n}$ dhaftcagga qqtaashaac g atq aaa aag aca got ato gog att goa gtg Met Lys Lys Thr Ala Ile Ala Ile Ala Val 27/ 318 $_{
m MO}$ geW ofg got ggt the get abougta gog dag god tge ggt ggt etg acc 99 3.1 Ala Leu Ala Gly Phe Ala Thr Val Ala Gln Ala Cys Gly Gly Leu Thr 2.0 1.5 N/4 gan acc cty cag dog gaa acc gad dag gtg gaa gad gaa aaa too gog 147 5.75 Asp Thr Leu Gln Ala Glu Thr Asp Gln Val Glu Asp Glu Lys Ser Ala τ, ε, 3.1) 306 32% of global accided atcligog and otglotig and gan and gan and otgligag 195 309 bou Gln Thr Glu fle Ala Asn Leu Leu Lys Glu Lys Glu Lys Leu Glu 50 45 332 the ato etg geg gea cae ggt ggt tgc ggt ggt tet geg gee get ± 40 333 Fhe Ile Leu Ala Ala His Gly Gly Cys Gly Gly Ser Ala Ala Ala 70 65 60 334 261 336 gagtatgaga atatcaaget t 339 - 1100 SEC ID NO: 21 340 - 2115 LENGTH: 73 341 - Ji. H TYPE: FFT 42 . 19. GR WANLEM: Astificial Sequence ::: . THE FEATURE: :45 - . Par OTHER INFORMATION: Fos fusion construct :42 - 4:0 - SEQUENCE: /1 344 Met bys bys Thr Ala Ile Ala Ile Ala Val Ala Leu Ala Gly Phe Ala 1.0 N1 (1) 14. Thr Val Ala Gin Ala Cys Gly Gly Leu Thr Asp Thr Leu Gln Ala Glu 3.0 .1.5 20 35% Thr Asp Glr. Val Glu Asp Glu Lys Ser Ala Leu Gln Thr Glu Ile Ala 4.0J56 35

RAW SEQUENCE LISTING ERROR SUMMARY PATENT APPLICATION: US/10/050,898

DATE: 01/27/2003 TIME: 09:46:26

Input Set : A:\1700.0190005seqlist.txt
Output Set: N:\CRF4\01242003\J050898.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:111; Xaa Pos. 28
Seq#:283; N Pos. 9820

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/050,898

DATE: 01/27/2003 TIME: 09:46:26

Input Set : A:\1700.0190005seqlist.txt
Output Set: N:\CRF4\01242003\J050898.raw

L:2389 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:111 after pos.:16

L:5193 M:300 W: (50) Intentionally skipped Sequence, : Sequence Id (177) SEQUENCE:

L:9617 M:341 W: (46) "n" or "Xaa" used, for SEQ 1D#:283 after pos.:9780